

THE CORPORATION OF THE CITY OF WINDSOR POLICY

Service Area:	Office of the City Engineer	Policy No.:	
Department:	Engineering	Approval Date:	November 18, 2019
Division:	Infrastructure	Approved By:	CR554/2019
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Subject:	Street Lighting Policy	Procedure Ref.:	
Review Date:	First year after approval then every five years.	Pages:	Replaces: City of Windsor Street Lighting Policy
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1. POLICY

1.1 The Corporation of the City of Windsor is committed to outline effective policy for street lighting as it relates to lighting levels, installation of decorative fixtures, safety concerns, and request for improved lighting through Local Improvements and capital projects for residential and commercial areas.

2. PURPOSE

2.1 To ensure consistency and uniformity for the existing and future street lighting design and installation throughout the city.

2.2 To ensure that city streets are illuminated to the City's standard lighting levels (ANSI/IESNA RP-8-14 or most current revision of ANSI/IESNA RP-8). Areas that may benefit from street lighting are pedestrian walkways (i.e. sidewalks), alleys and other city owned lands (i.e. parks and facilities) **but** may or may not be considered as part of the streetlight system.

2.3 To ensure streetlight funding is for the illumination and the maintenance of street lighting and associated infrastructure within city right-of-ways.

2.4 To ensure that approved lighting equipment is utilized.

3. SCOPE

3.1 This policy applies to any City of Windsor Department certifying, designing installing and/or maintaining streetlights and associated infrastructure within the public right-of-way.

3.2 Other policy applicable with this policy is the Local Improvement Policy

4. RESPONSIBILITY

4.1 **City Council** is responsible for:

4.1.1 The final approval and any amendments of the Street Lighting Policy.

4.1.2 To approve funding to continue to maintain and improve the citywide street lighting system.

4.2 Standing Committees are responsible for:

4.2.1 Reviewing and approving the Street Lighting Policy and any amendments and forwarding committee reports with recommendations to City Council for final approval.

4.3 The Chief Administrative Officer (CAO) is responsible for:

4.3.1 Providing approval of the Street Lighting Policy and any amendments to the Standing Committee Level.

4.3.2 Supporting the Street Lighting Policy including providing guidance and/or direction on issues that may arise.

4.4 Corporate Leadership Team (CLT) is responsible for:

4.4.1 Providing approval of the development of the Street Lighting Policy and any amendments prior to the CAO for their authorization.

4.4.2 Supporting Street Lighting Policy including providing guidance and/or direction on issues that may arise.

4.5 Department Head, Manager or Supervisor is responsible for:

4.5.1 Reviewing the Street Lighting Policy to determine whether updates are required.

4.5.2 Determine the need of the policy.

4.5.3 Consult with other relevant stakeholders.

4.5.4 Forward the proposed policy and accompanying report to the CLT for approval.

4.5.5 Oversee the street lighting portfolio includes paying invoices for maintenance and capital projects for the street light system.

4.5.6 Supporting Street Lighting Policy including providing guidance and/or direction on issues that may arise.

4.6 Engineer III is responsible for:

4.6.1 Oversee the daily operations of the street lighting portfolio.

4.6.2 Communicating any changes or issues related to street lighting which may include new technology, request for lighting for both Local Improvement, and Capital projects.

4.6.3 Payment of invoices for related to street lighting (i.e. maintenance).

4.6.4 Maintaining and updating service requirements for the street lighting.

4.6.5 Overseeing street lighting capital projects.

5. GOVERNING RULES AND REGULATIONS

5.1 DEFINITIONS

5.1.1 Street Lighting System –is composed of approximately 24,000 street light fixtures, the associated wiring, poles, controls, meters, transformers, conduits and photocells/shorting caps.

5.1.2 Pole – is any wooden, steel or concrete structure which may or may not have a fixture attached to it and is connected by wire for the operation of the street lighting system. Poles ownership can be either be city-owned poles or poles owned by other utilities, mainly EnWin Utilities. There are approximately 15,000 city-owned poles.

- 5.1.3 **Fixture** – is the light source used to provide lighting for the roadway. There are two classification fixtures of cobra heads and decorative. As of December 2016, there were 21,428 LED roadway fixtures and the remainder of the fixtures are decorative.
- 5.1.4 **Photocell or Shorting Cap** – Photocell is a light sensory control device that turns on or off a fixture. Shorting Caps are mainly associated with fixtures on EC Row which are connected to a master photocell(s).
- 5.1.5 **LED Fixture** – is a streetlight fixture that utilizes light emitting diode technology.
- 5.1.6 **Decorative Fixture** – is a streetlight fixture which is considered an upgrade from the cobra head due to shape and architectural features.
- 5.1.7 **Residential Area** – is an area in which the City’s official plan is considered complied of majority of used for dwellings
- 5.1.8 **BIAs** – is an area in which the city’s official plan is considered composed of business and shopping areas.
- 5.1.9 **Lighting Levels** – The amount of light measured on a roadway with a photometric device.
- 5.1.10 **ANSI/IESNA RP-8** – is short form for American National Standard Institute/Illuminating Engineering Society of North America with RP-8 as the American National Standard Practice for Roadway Lighting, last amended in 2014.
- 5.1.11 **Standard Street Lighting** – consist of approved concrete pole, LED fixture, bracket and associated wiring.
- 5.1.12 **Pedestrian Lighting** – Any lighting designed to illuminate the sidewalk/walkway. A pedestrian fixture is usually decorative in nature and can be attached to the streetlight pole over hanging the sidewalk/walkway or on its own pole.
- 5.1.13 **Colour Temperature** – All standard street lighting is to have a colour temperature of 4000k unless otherwise directed by the City Engineer or designate. All new decorative light fixtures are to have a colour temperature of 3000k.

5.2 LIGHTING LEVELS

- 5.2.1 Lighting levels for city roadways are to meet ANSI/IESNA RP-8 as approved by CR 146/2015 for all new construction or installation of street light fixtures and poles. The glare factor **for decorative poles only** may be exempt from the lighting calculation results in order to keep with the existing height and spacing of poles within a residential area.
- 5.2.2 Lighting levels for all roadways with existing poles that are less than required lighting levels as outlined in ANSI/IESNA RP-8 will be grandfathered until replaced.

5.3 USE OF DECORATIVE FIXTURES

- 5.3.1 Decorative fixtures are generally reserved for BIAs, themed areas noted in the City’s Official Plan and residential areas.
- 5.3.2 Any decorative fixture must be approved by City Engineer or designate prior to design of the street lighting. It is preferable that

decorative fixtures be selected agreed upon by the City's Planning and Engineering and the City's maintenance provider.

- 5.3.3** Decorative fixtures are usually installed on new residential streets where the cost of street lighting is included with the cost of developing the lands. However, when an existing residential area would like to upgrade the street lighting to decorative fixtures, any city contribution funding will be based on standard street lighting. All additional costs will be paid for by the property owners and/or other sources.

5.4 DESIGN AND INSTALLATION OF STREET LIGHTING FOR ROADWAYS

- 5.4.1** All new design for street lighting of city roadways must meet ANSI/IESNA RP-8.
- 5.4.2** All designs must utilize LED fixtures. Fixture types are to be from pre-approved list or additional approval is required from City Engineer or Designate.
- 5.4.3** Designs shall consider pedestrian traffic, location of sidewalks, location of existing or proposed driveways/egresses.
- 5.4.4** Photometrics of the streetlight design must be submitted and approved prior to any installation.
- 5.4.5** As-builts which are to include the serial number of each fixture installed are to be submitted to the City or its maintenance provider prior to EnWin connection.

5.5 REQUEST FOR NEW OR IMPROVEMENT STREET LIGHTING ON EXISTING ROADWAYS

- 5.5.1** Funding for new or improved street lighting on highways, arterial, and collectors will be through the City's Capital budget.
- 5.5.2** To request street lighting on roadway without any lighting, property owners are required to follow the Local Improvement Policy.
- 5.5.3** As part of a road rehabilitation project, allowances are to be made to improve the street lighting to city standards and to improve the street lighting infrastructures (i.e. poles, wiring, etc.) where street lighting currently exists.

5.6 REQUEST FOR LIGHTING DUE TO SAFETY CONCERNS

- 5.6.1** In special occasions, lighting may be installed to deter criminal activities. A history of previous criminal activities must be confirmed by Windsor Police and the support that lighting will assist in the deterrence prior to the installation of lighting. This lighting will be funded from the capital account.
- 5.6.2** There may be requests to light alleys and/or walkways to deter criminal activities and to promote safe travel areas. Each request will be reviewed on its only merit for need and will fund by other means (i.e. ward fund) unless directed by the City Engineer or designate.

5.7. FESTIVE/HOLIDAY LIGHTING

5.7.1 Holiday/Festival lighting can be attached to streetlight poles. Requests will be reviewed with input from other departments, i.e. Planning, Development, Projects and ROW. All funding for the installation, general maintenance and energy of festive/holiday lighting is to come from other sources unless otherwise directed.

5.8 PEDESTRIAN LIGHTING

5.8.1 Pedestrian lighting may be installed in specific areas, i.e. BIAs or high pedestrian generators. The street lighting levels will be calculated separate from the pedestrian lighting levels. The street lighting must meet RP-8 requirements without including the pedestrian lighting. Any installation of pedestrian lighting is to be through a capital project.

6. RECORDS, FORMS AND ATTACHMENTS

6.1 All records in relation to this policy will be kept in accordance with *Records Retention By-Law 21-2013*.